Attachment Security and Alexithymia in a Heavy Drinking Sample.

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Abstract

Attachment difficulties have been proposed as a key risk factor for the development of alexithymia, a multifaceted personality trait characterised by difficulties identifying and describing feelings, a lack of imagination and an externally oriented thinking style. The present study investigated the relationship between attachment and alexithymia in an alcohol dependent population. Participants were 210 outpatients in a Cognitive Behavioural Treatment Program assessed on the Toronto Alexithymia Scale (TAS-20) and the Revised Adult Attachment Scale (RAAS). Significant relationships between anxious attachment and alexithymia factors were confirmed. Furthermore, alexithymic alcoholics reported significantly higher levels of anxious attachment and significantly lower levels of closeness (secure attachment) compared to non-alexithymic alcoholics. These findings highlight the importance of assessing and targeting anxious attachment among alexithymic alcoholics in order to improve alcohol treatment outcomes.

Keywords: Attachment, alexithymia, alcohol dependence.

Contemporary attachment theory provides a theoretical framework for understanding emotion regulation (Shaver & Mikulincer, 2007). Anxious attachment is associated with dysfunctional mood regulation and interpersonal difficulties in those with substance use disorders (Thorberg & Lyvers, 2006; Thorberg & Lyvers, 2010). Alexithymia is a personality trait associated with difficulties identifying feelings (DIF), difficulties describing feelings (DDF) and externally oriented thinking (EOT) (Nemiah, Freyberger, & Sifneos, 1976). Attachment theory (Krystal & Krystal, 1988; Taylor, Bagby, & Parker, 1997) highlights the importance of childhood events such as traumatic experiences and/or dysfunctional parental bonding in the development of alexithymia. A recent meta-analysis found that maternal overprotection and lack of maternal care (indicating a dysfunctional parenting style) were both associated with alexithymia (Thorberg, Young, Sullivan, & Lyvers, in press). Difficulties identifying and describing feelings had the strongest relationships with lack of maternal care across the nine studies reviewed (see Thorberg et al., in press). Adult attachment studies have also reported a positive association between avoidant fearful attachment and difficulties identifying and describing feelings and negative relationships with secure attachment (Farinelli, Ercolani, Trombini, & Bortolotti, 2007; Wearden, Lamberton, Crook, & Walsh, 2005) indicating that these findings hold beyond parental relationships.

Attachment is relevant to alcohol misuse given the association between alcohol use disorders and poor interpersonal functioning (Flores, 2004; Thorberg & Lyvers, 2006; Thorberg & Lyvers, 2010). Difficulties in overcoming anxious attachment may promote alcohol misuse as a way of coping due to a lack of close personal relationships (Ainsworth, 1989; Flores, 2004). Some individuals may become dependent on alcohol to help them in circumstances involving intimacy and the avoidance of rejection. Alcohol has been hypothesised to alleviate emotional pain, anger and ambivalence (Hofler & Kooyman, 1996). Anxious attachment is associated with heavy alcohol consumption, harmful drinking patterns

and substance use disorders (Cooper, Shaver, & Collins, 1998; McNally, Palfai, Levine, & Moore, 2003; Thorberg & Lyvers, 2006; Vungkhanching, Sher, Jackson, & Parra, 2004) and has been linked prospectively to the development and severity of alcohol dependence (Ridinger, Konig, Lange, & Wodarz, 2009). Alexithymia is also highly prevalent in these studies with rates of 45-67% in alcohol dependent populations. Significant relationships between alexithymia, alcohol craving and alcohol problem severity have been reported in those with combined alexithymia and alcohol dependence (Thorberg et al., 2010; Thorberg et al., 2011). It is therefore not surprising that treatment approaches are less successful amongst alcohol dependent individuals with alexithymia (Loas, Fremaux, Otmani, Lecercle, & Delahousse, 1997; Ziolkowski, Gruss, & Rybakowski, 1995). Although anxious attachment is considered a key risk for alexithymia, most studies examining alexithymia in alcohol dependent populations, have not investigated hypothesised relationships with attachment.

Two studies (De Rick & Vanheule, 2006; De Rick & Vanheule, 2007) within the same sample (n=101), examined the relationship between adult attachment styles and alexithymia in alcohol dependent patients and applied the Bermond Vorst Alexithymia Questionnaire (BVAQ; Vorst & Bermond, 2001). These identified a relationship between avoidant attachment and alexithymia. Anxiously attached alcohol dependent patients reported higher levels of difficulty in describing feelings compared to securely attached alcohol dependent patients (De Rick & Vanheule, 2006; De Rick & Vanheule, 2007). As a more recent instrument, the BVAQ has not been subjected to the same degree of psychometric validation as the TAS-20 and given that a recent study found no support for the distinction of two higher order alexithymia factors (Cognitive and Affective alexithymia; see Bagby et al., 2009) further research involving the BVAQ is needed. Thus, here we apply the well validated Toronto Alexithymia Scale (TAS-20; Bagby, Parker, & Taylor, 1994) in concert with a measure of continuous attachment dimensions in the examination of attachment and

alexithymia. The aims of the current study were to explore relationships between Close, Depend and Anxious attachment dimensions of the Revised Adult Attachment Scale and alexithymia as measured by the Toronto Alexithymia Scale including its subcomponents DIF, DDF and EOT.

Method

Participants

Two hundred and ten patients (144 males and 66 females) were consecutively recruited from a voluntary Cognitive Behavioural Treatment (CBT) program for alcohol dependence (mean age = 38.17 years, *sd* = 10.82). All participants met DSM-IV-TR criteria for alcohol dependence (American Psychiatric Association, 2000). Exclusion criteria were co-morbid psychiatric disorders which significantly impaired functioning, organic brain syndrome or heavy sedation. The Brief Michigan Alcoholism Screening Test (see bMAST; Pokorny et al., 1972; Selzer et al., 1971) yielded an overall mean score of 16.60 (*sd* = 8.27) with a range of 29 suggesting that the whole sample scored in the alcohol dependent range (Kagan-Krieger et al., 2002).

Measures

The Revised Adult Attachment Scale (RAAS; Collins, 1996; Collins & Read, 1990) was designed to assess three adult attachment dimensions; Close, Depend and Anxiety. It should be emphasised that the RAAS does not assess attachment styles per se, but continuous attachment dimensions hypothesised to underlie adult attachment (Collins 1996). The Close subscale measures how comfortable the individual is with intimacy. The Depend subscale measures the extent to which the individual feels they can depend on others to be available when needed. The Anxiety subscale measures how anxious the subject feels about being

abandoned or unloved. High scores on Close and Depend, and low scores on the Anxiety dimension, indicate a secure attachment style (Collins & Read, 1990; Collins 1996).The RAAS has sound psychometric properties (Collins, 1996; Goldman & Anderson, 2007).

The Toronto Alexithymia Scale (TAS-20) is a 20 item self-report measure of alexithymia. The scale has a three factor structure consisting of difficulties identifying feelings (DIF), difficulties describing feelings (DDF) and externally oriented thinking (EOT) (Bagby et al., 1994). Higher scores indicate higher levels of alexithymia. Cut-off scores categorise individuals as alexithymic if the total is > 61, borderline alexithymic if 52-60, or non-alexithymic if < 51 (Bagby et al., 1994). The TAS-20 has sound validity and reliability (Bagby et al., 1994; Parker, Taylor, & Bagby, 2003).

Procedure

Human research ethics approval was granted by the university and hospital ethics committees. Patients completed self-report questionnaires prior to the first treatment session. Less than 3 % refused participation in the voluntary treatment program.

Results

Pearson's correlations between RAAS-Close, TAS-20 total score, DIF, DDF and EOT were significant (r= -0.40; r= -0.20; r= -0.36; r= -0.31 respectively). The RAAS-Depend scale was significantly correlated with TAS-20 (r= -0.30), DIF (r= -0.31), DDF (r= -0.24), but not with EOT (r= -0.13). Pearson's correlations of RAAS-Anxiety, TAS-20 total score, DIF, DDF and EOT were all significant (r=0.43; r=0.48; r=0.31; r=0.16 respectively). All correlations were significant at the $p < .01$ level. A hierarchical regression analysis was undertaken with gender entered in step one and RAAS–Close, Depend and Anxiety in step two. At step one, gender was not significant $F(3, 206) = 1.69$, $p = .19$. At step two, the RAAS significantly predicted

total TAS-20 score (F (3, 206) = 23.50, $p < .0005$) accounting for 25.8% of the variance (R^2 = .258, $p < .0005$). RAAS-Close (β = .30, $t(3) = -4.31$, $p < .0005$) and RAAS-Anxiety (β = .34, $t(3) = 4.71$, $p < .0005$) added significant variance towards total TAS-20 score.

A two-way multivariate analysis of covariance (MANCOVA) was performed with the independent variable of alexithymia group (alexithymic, borderline-alexithymic, non-alexithymic), and the dependent variables of RAAS scores (Close, Depend, Anxiety). Gender was the covariate. The overall MANCOVA was significant for group $F(6, 398) = 8.61$, $p = .0001$, whereas the multivariate effect of gender was not, $F(6, 199) = 1.30$, $p = .275$. Univariate effects of TAS group were significant for RAAS-Close, $F(2, 202) = 13.63$, $p = .0001$; RAAS-Depend, $F(2, 202) = 6.36$, $p = .002$; and RAAS-Anxiety , $F(2, 202) = 18.81$, $p = .0001$. Compared to non-alexithymic alcoholics, borderline alexithymic and alexithymic alcoholics scored significantly higher on all attachment dimensions (see Table 1).

Discussion

The Toronto Alexithymia Scale has not been previously applied to adult attachment dimensions among alcohol dependent outpatients. Our findings support that the Close and Depend attachment factors were negatively associated with alexithymia, DIF and DDF. Close was negatively associated with EOT, but Depend was not. Anxious attachment was positively related to all alexithymia factors. The Close and Anxious attachment dimensions were predictive of alexithymia accounting for 25.8% of the variance in total alexithymia score. These findings suggest that those with higher levels of alexithymia as well as difficulties identifying and describing feelings are less comfortable with being intimate with a romantic partner. They are also more uncertain about whether they can depend on their partners in romantic relationships and more fearful about being unloved. Attachment theory according to Bowlby (1988) proposes that the capacity to establish emotional bonds with others is

essential for effective personality functioning. Difficulties in overcoming anxious attachment orientations may leave individuals open to misusing alcohol as a way of compensating for the lack of adaptive intimate relations or to assist in affect regulation related to relationship functioning (Ainsworth, 1989; Flores, 2004).

Our results also showed that borderline alexithymic and clinically alexithymic alcohol dependent patients reported significantly higher levels of Anxious attachment and lower levels of Close and Depend (secure) attachment compared to their non-alexithymic counterparts. Perhaps the higher levels of interpersonal problems among those with alexithymia are due to anxious attachment. As individuals with alexithymia have a tendency to display a cold and avoidant interpersonal style (Spitzer, Siebel-Jurges, Barnow, Grabe, & Freyberger, 2005) and establish an insecure attachment relationship with their therapist, the establishment of a supportive therapeutic relationship may be particularly important for promoting adherence to alcohol treatment (Bowlby, 1978; Ogrodniczuk, Piper, & Joyce, 2008). This is particularly important given that alexithymia can predict relapse in alcohol dependent outpatients (Loas et al., 1997). Evidence from clinical samples has reported that higher levels of alexithymia, DDF and EOT were related to more negative reactions from the therapist (Ogrodniczuk, Piper, & Joyce, 2008) and that he therapeutic relationship was found to be a mediator of the link between alexithymia and treatment outcome (Ogrodniczuk, Piper, & Joyce, 2005). Thus, assessing alexithymia and attachment information pre-treatment in alcoholics may be beneficial in addition to creating a securely attached working alliance that includes positive feedback from the therapist. Within such a therapeutic framework a focus on the establishment of earned attachment security might be one treatment goal, which in turn may improve emotion regulation abilities and lead to reduced alcohol consumption (see Thorberg & Lyvers, 2010). The development of relationship skills regarding intimacy and partner selection using Cognitive Behavioural Therapy appears to be particularly important in

this context. Some limitations were evident. The lack of a control group made it difficult to ascertain whether the present findings are characteristic for those with alcohol dependence only. Given the cross sectional design of this study Prospective research is needed to examine potential causal relationships between attachment, alexithymia and alcohol dependence. Based on the present findings it was not possible to examine whether alexithymic alcoholics have an ability to understand some emotions, but not others and how this pertains to dysregulation and the propensity to develop alcohol problems, which should be addressed in future research. In conclusion, further research is needed to consider the relationship between attachment, alexithymia, therapist reactions and treatment outcome using a prospective design to clarify the role of the therapist's reaction as a mechanism potentially influencing the association between alexithymia and treatment outcome in alcohol dependent samples.

Declaration of interest

'The authors report no conflicts of interest'.

References

Ainsworth, M. S. (1989). Attachments beyond infancy. *American Psychologist, 44*(4), 709-716.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed text rev. ed.). Washington, DC: American Psychiatric Association.

Bagby, R. M., Parker, J. D. A., & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia Scale: I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research, 38*(1), 23-32.

Bagby, R. M., Quilty, L. C., Taylor, G. J., Grabe, H. J., Luminet, O., Verissimo, R., et al. (2009). Are there subtypes of alexithymia? *Personality and Individual Differences, 47*(5), 413-418.

Bowlby, J. (1978). Attachment theory and its therapeutic implications. *Adolescent Psychiatry, 6*, 5-33.

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development.* New York: Basic Books

Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology, 71*(4), 810-832.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*(4), 644-663.

Cooper, M. L., Shaver, P. R., & Collins, N. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. *Journal of Personality and Social Psychology, 74*, 1380-1397.

De Rick, A., & Vanheule, S. (2006). The relationship between perceived parenting, adult attachment style and alexithymia in alcoholic inpatients. *Addictive Behaviors, 31*(7), 1265-1270.

De Rick, A., & Vanheule, S. (2007). Attachment styles in alcoholic inpatients. *European Addiction Research, 13*(2), 101-108.

Farinelli, M., Ercolani, M., Trombini, G., & Bortolotti, M. (2007). Gastroesophageal reflux disease: Alexithymia and attachment style. *Perceptual and Motor Skills, 105*(1), 347-350.

Flores, P. J. (2004). *Addiction as an attachment disorder*. New York: Jason Aronson.

Goldman, G. A., & Anderson, T. (2007). Quality of Object Relations and Security of Attachment as Predictors of Early Therapeutic Alliance. *Journal of Counseling Psychology, 54*(2), 111-117.

Hoefler, D. Z., & Kooyman, M. (1996). Attachment transition, addiction and therapeutic bonding - An integrative approach. *Journal of Substance Abuse Treatment, 13*(6), 511-519.

Kagan-Krieger, S., Selby, P., Vohra, S., Koren, G., 2002. Paternal alcohol exposure and Turner syndrome. Alcohol and Alcoholism 37, 613-617.

Krystal, H., & Krystal, J. H. (1988). *Integration and self-healing: Affect, trauma, alexithymia.* Hilldale, NJ, US: Analytic Press, Inc.

Loas, G., Fremaux, D., Otmani, O., Lecercle, C., & Delahousse, J. (1997). Is alexithymia a negative factor for maintaining abstinence? A follow-up study. *Comprehensive Psychiatry, 38*(5), 296-299.

McNally, A. M., Palfai, T. P., Levine, R. V., & Moore, B. M. (2003). Attachment dimensions and drinking-related problems among young adults: the mediational role of coping motives. *Addictive Behaviors, 28*, 1115-1127.

Nemiah, J. C., Freyberger, H., & Sifneos, P. E. (1976). Alexithymia: a view of the psychosomatic process. In O. Hill (Ed.), *Modern trends in psychosomatic medicine.* (Vol. 3). London: Butterworths.

Ogrodniczuk, J. S., Piper, W. E., & Joyce, A. S. (2005). The negative effect of alexithymia on the outcome of group therapy for complicated grief: What role might the therapist play? *Comprehensive Psychiatry, 46*(3), 206-213.

Ogrodniczuk, J. S., Piper, W. E., & Joyce, A. S. (2008). Alexithymia and Therapist Reactions to the Patient: Expression of Positive Emotion as a Mediator. *Psychiatry-Interpersonal and Biological Processes, 71*(3), 257-265.

Parker, J. D. A., Taylor, G. J., & Bagby, R. M. (2003). The 20-item Toronto Alexithymia Scale - III. Reliability and factorial validity in a community population. *Journal of Psychosomatic Research, 55*(3), 269-275.

Pokorny, A. D., Miller, B. A., & Kaplan, H. B. (1972). The brief MAST: A shortened version of the Michigan Alcoholism Screening Test. *American Journal of Psychiatry, 129*(3), 342-345.

Ridinger, M., Konig, S., Lange, K., & Wodarz, N. (2009). The impact of attachment styles and ADHD on alcohol dependence. *Nervenarzt, 80*(7), 827-832.

Selzer, M. L. (1971). The Michigan Alcoholism Screening Test: The quest for a new diagnostic instrument. *American Journal of Psychiatry, 127*(12), 1653-1658.

Shaver, P. R., & Mikulincer, M. (2007). *Adult Attachment Strategies and the Regulation of Emotion.* New York, NY, US: Guilford Press.

Spitzer, C., Siebel-Jurges, U., Barnow, S., Grabe, H. J., & Freyberger, H. J. (2005). Alexithymia and interpersonal problems. *Psychotherapy and Psychosomatics, 74*(4), 240-246.

Taylor, G. J., Bagby, R. M., & Parker, J. D. A. (1997). *Disorders of affect regulation: alexithymia in medical and psychiatric illness.* Cambridge (UK): Cambridge University Press.

Thorberg, F. A., & Lyvers, M. (2006). Attachment, fear of intimacy and differentiation of self among clients in substance disorder treatment facilities. *Addictive Behaviors, 31*(4), 732-737.

Thorberg, F. A., & Lyvers, M. (2010). Attachment in relation to affect regulation and interpersonal functioning among substance use disorder inpatients. *Addiction Research & Theory, 18*(4), 464-478.

Thorberg, F. A., Young, R. M., Sullivan, K. A., & Lyvers, M., (in press). Parental bonding and alexithymia: A meta-analysis. *European Psychiatry*

Thorberg, F. A., Young, R. M., Sullivan, K. A., Lyvers, M., Connor, J. P., & Feeney, G. (2011).Alexithymia, craving and attachment in a heavy drinking population.*Addictive Behaviors, 36*, 427-730..

Thorberg, F. A., Young, R. M., Sullivan, K. A., Lyvers, M., Connor, J. P., & Feeney, G. F. X. (2010). A psychometric comparison of the Toronto Alexithymia Scale (TAS-20) and the Observer Alexithymia Scale (OAS) in an alcohol-dependent sample. *Personality and Individual Differences, 49*(2), 119-123.

Vorst, H. C. M., & Bermond, B. (2001). Validity and reliability of the Bermond-Vorst Alexithymia Questionnaire. *Personality and Individual Differences, 30*(3), 413-434.

Vungkhanching, M., Sher, K. J., Jackson, K. M., & Parra, G. R. (2004). Relation of attachment style to family history of alcoholism and alcohol use disorders in early adulthood. *Drug and Alcohol Dependence, 75*(1), 47-53.

Wearden, A. J., Lamberton, N., Crook, N., & Walsh, V. (2005). Adult attachment, alexithymia, and symptom reporting - An extension to the four category model of attachment. *Journal of Psychosomatic Research, 58*(3), 279-288.

Ziolkowski, M., Gruss, T., & Rybakowski, J. K. (1995). Does alexithymia in male alcoholics constitute a negative factor for maintaining abstinence? *Psychotherapy and Psychosomatics, 63*(3), 169-173.

Table 1. Mean attachment RAAS scores grouped by degree of alexithymia.

	Degree of alexithymia (TAS-20)		
Attachment factors	Alex (n = 68)	B-Alex (n = 53)	N-Alex (n = 89)
RAAS-Close	17.57 (4.21)**	19.45 (4.28)	21.06 (4.06)
RAAS-Depend	15.19 (3.89)*	16.94 (4.14)	17.41 (4.46)
RAAS-Anxiety	20.79 (5.74)**	17.82 (5.44)	15.05 (6.19)

*p = .002, **p = .0001. Alex=Alexithymic, B-Alex=Borderline Alexithymic, N-Alex=Non-Alexithymic.